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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,868	11/01/2000	Laddie L. James	9066.002	8108

7590                    06/03/2003

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[REDACTED] EXAMINER

NGUYEN, DINH Q

ART UNIT	PAPER NUMBER
3752	14

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/642,868	JAMES, LADDIE L.
	Examiner Dinh Q Nguyen	Art Unit 3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
  - 2a) This action is FINAL.                    2b) This action is non-final.
  - 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.
- Disposition of Claims**
- 4) Claim(s) 1-21 is/are pending in the application.
    - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
  - 5) Claim(s) \_\_\_\_\_ is/are allowed.
  - 6) Claim(s) 1-21 is/are rejected.
  - 7) Claim(s) \_\_\_\_\_ is/are objected to.
  - 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.
 

If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
  - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

1. In view of the appeal brief filed on March 03, 2003, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Herzog.

Herzog discloses a spraying device 10 mountable on a truck 12 comprising: an engine 24 having an exhaust pipe 26; a storage tank 14 under pressure during operation;

a first line 60 for connecting the exhaust pipe 26 to the storage tank 14 and serving as a source of pressure;

a second line 71 for connecting the storage tank 14 to a nozzle 91; and a pressure relief valve 43;

and operating pressures of up to 35 PSI (column 2, line 7).

Herzog discloses a pressurization system for pressurizing a liquid holding tank

on a truck for spraying water onto road surfaces (column 1, lines 7-12).

However, MPEP 2114 states that apparatus claims must be structurally distinguishable from the prior art. The structures recited in claims 1-4, 13-16 do not structurally distinguishable from the Herzog structure. Instead claims 1-4, 13-16 differ from Herzog only in the function of the structure. While claims 1-4, 13-16 require spraying tack, Herzog is limited to spraying water, or at best liquid.

Accordingly, claims 1-4, 13-16 are anticipated by Herzog. The absence of a disclosure in Herzog of the particular function of spraying tack material instead of water does not defeat the finding of anticipation. A new intended use of an old structure does not make a claim to the old structure patentable. Moreover, the structure disclosed in Herzog is inherently capable of dispensing liquids other than water such as, for example tack material.

Furthermore, MPEP 2115 states that the material or the article worked upon does not limit apparatus claims. The structures recited in claims 1-4, 13-16 only differ from Herzog in its recitation of the material worked upon by the apparatus. Accordingly, the Herzog structures show all the elements claimed. The particular material worked on by the apparatus will not impart patentability to

the claims, and that the manner in which the machine is used is not germane to the issue of the patentability of the machine itself.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kirchner et al. in view of Herzog.

Kirchner discloses a tack-spraying vehicle having an engine with exhaust pipe, a storage tank 84 for maintaining tack-spraying material. Kirchner does not disclose transfer of engine exhaust to pressurize to the storage tank. However, Herzog teaches the use of a pressurization system using exhaust gases for dispensing a liquid, a pressure relief valve 43; and operating pressures of up to 35 PSI (column 2, line 7). Therefore, it would have been obvious to one having ordinary skill in the art to modify the liquid dispensing system of Kirchner by replacing the pump 34 with a pressurization system using exhaust gas as taught by Herzog in order to simplify the system by elimination the need for a pump (column 1, lines 35-68).

6. Claims 1-4, 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog in view of Furman and Haupt.

Herzog discloses a spraying device 10 mountable on a truck 12 comprising:  
an engine 24 having an exhaust pipe 26;  
a storage tank 14 under pressure during operation;  
a first line 60 for connecting the exhaust pipe 26 to the storage tank 14 and serving as a source of pressure;  
a second line 71 for connecting the storage tank 14 to a nozzle 91; and a pressure relief valve 43;  
and operating pressures of up to 35 PSI.

However, Herzog discloses a pressurization system for pressurizing a liquid holding tank on a truck for spraying water onto road surfaces (column 1, lines 7-12), but fails to disclose a tack material for spraying. Furman discloses a spraying apparatus having a liquid storage tank 6, an internal combustion engine 12 with an exhaust manifold 7 and an exhaust pipe 16, which connects to the storage tank via pipe 15 to pressurize the liquid within the tank 6. Haupt discloses a tack spraying apparatus with a storage tank 1 and pump 38 to pressurize the asphalt within tank 1. Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Herzog with a tack material for spraying as suggested by Furman (using exhaust gas to pressurize a liquid within a storage tank) and Haupt (pressurized an asphalt tank to force the asphalt to spray bars 23a and 23b to spray a road surface). Doing so would provide a way to pressurize a liquid within a tank (Furman's column 2,

lines 11-14) and forcing the liquid to the spray bars (Haupt's column 3, lines 25-27).

7. Claims 5, 6, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog or Kirchner/Herzog or Herzog/Furman/Haupt as applied to claims 1-4, 12-16 above, and further in view of Clark, Jr. et al.

Herzog or Kirchner/Herzog or Herzog/Furman/Haupt teaches all the limitations of the claims except for spraying rate of at least .02 gallons per square yard . However, Clark discloses a broad range spraying rate for an asphalt-spraying device is of 0.15-0.38 gallons per square yard. Therefore, it would have been obvious to one having ordinary skill in the art to configure the device of Herzog or Kirchner/Herzog or Herzog/Furman/Haupt with a spraying rate of at least .02 gallons per square yard as suggested by Clark. Doing so would provide a way to optimize the spraying range for the system (column 1, lines 36-46).

With respect to claims 6 and 18, the spraying rate of .02-.08 gallons per square yard is an obvious matter of design choice to a person of ordinary skill in the art, since the spray rate is depended on the system pressure, the nozzle opening, and traveling speed of the tanker truck.

8. Claims 7-11 and 19-21are rejected under 35 U.S.C. 103(a) as being unpatentable over Herzog or Kirchner/Herzog or Herzog/Furman/Haupt as applied to claims 1-4, 12-16 above.

Herzog or Kirchner/Herzog or Herzog/Furman/Haupt teaches all the limitations of the claims except for functional values such as nominal orifice diameter, spray rate and spray pressure . However, these values are related to

the operation of the system, in order to maintain an optimal operating condition for the system, the opening of the orifice required an optimal value of the system pressure, and a spray rate could also depend upon the nominal diameter of the orifices on a spray bar and the viscosity of the material. In the absent of the unexpected results obtained form the claim values, it seems that these values fall within the range of a tack spraying device. Therefore, the functional values depend upon the desired results to be obtained, thus it would have been an obvious matter of design choice to a person of ordinary skill in the art.

With respect to claim 9, with the unexpected result that any polymer ball may develop within the tank, one skilled in the art should be able to provide the spraying system with the optimal values for the orifice diameter, and control the amount of heat absorbed by the material to maintain the desired viscosity and the optimal pressure to the system in order to minimize any build up of polymer balls within the storage tank.

***Response to Arguments***

9. Applicant's arguments filed March 03, 2003 have been fully considered but they are not persuasive.

10. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q Nguyen whose telephone number is (703) 305-0248. The examiner can normally be reached on Monday-Friday 6:30-4:00 alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

dqn  
June 2, 2003



Dinh Nguyen

Patent Examiner